

ABSTRACT OF THE INVENTION

The invention provides methods and systems for providing priority processing to critical data as the data is transmitted across a network. A plurality of Internet protocol (IP) packets, each of which contains data and priority information, are received at a first router. The data contained in the

5 IP packets is then encapsulated into frame relay frames containing the priority information. The frame relay frames are transmitted from the first router to a frame relay network in a manner determined by the priority information included in the frame relay frames. The frame relay frames are then transmitted across a frame relay network to a second router in a manner determined by the priority information included in the frame relay frames.